```
1   MFKSLTKVNKVKPIGENNENEQSSRRNEEGSHPSNQSQQTTAQEENKGEEKSLKTKSTPV Cng3BFL.pro
1   M------------AKINTQYSHPSR-----THLKVKTSDRDLNRAENGLSRAHSSSEETS CNGA3.pro
1   M-----KLS-MKNNIINTQQSFVTM-----PNVIVPDIEKEIRRMENGACSSFSEDDDSA CNGA1.pro

61  TSEEPHTNIQDKLSKKNSSGDLTTNPDPQNAAEPTGTVPEQKEMDPGKEGPNSPQNKPPA Cng3BFL.pro
44  SVLQPGIAMETRGLADSGQGSFTGQ------GIARLS---RLIFL---LRRWAARHVHHQ CNGA3.pro
50  STSE-----ESENENPHARGSFSYK------SLRKGGPSQREQYLPGAIALFNVNNSSNK CNGA1.pro

121 APVINEYADAQLHNLVKRMRQRTALYKKKLVEGDLSSPEASPQTAKPTAVPPVKESDDKP Cng3BFL.pro
92  DQGPDSFPDRFRGAELKEVSSQESNAQANVGSQEPADRGRSAWPLAKCNTNTSNNTEEEK CNGA3.pro
99  DQEPEE----------KKKKKKEKKSKSDDKNENKNDPEKKKKKKDKEKKKKEEKSKDKK CNGA1.pro

181 TEHYYRLLWFKVKKMPLTEYLKRIKLPNSIDSYTDRLYLLWLLLVTLA--YNWNCWFIPL Cng3BFL.pro
152 KTK---------KKDAIV-----------VDP-SSNLYYRWLTAIALPVFYNWY--LLIC CNGA3.pro
149 EEE---------KKEVVV-----------IDP-SGNTYYNWLFCITLPVMYNWT--MVIA CNGA1.pro

239 RLVFPYQTADNIHYWLIADIICDIIYLYDMLFIQPRLQFVRGGDIIVDSNELRKHYRTSP Cng3BFL.pro
169 RACFDELQSEYLMLWLVLDYSADVLYVLDV-LVRARTGFLEQGLMVSDTNRLWQHYKTTT CNGA3.pro
186 RACFDELQSDYLEYWLILDYVSDIVYLIDM-FVRTRTGYLEQGLLVKEELKLINKYKSNL CHGA1.pro

299 KFQLDVASIIPEDICYIFFGFN-PMFRANRMLKYTSFFEFNHHLESIMDKAYIYRVIRTT Cng3BFL.pro
248 QFKLDVLSLVPTDLAYLKVGTNYPEVRFNRLLKFSRLFEFFDRTETRTNYPNMFRIGNLV CNGA3.pro
245 QFKLDVLSLIPTDLLYFKLGWNYPEIRLNRLLRFSRMFEFFQRTETRTNYPNIFRISNLV CHGA1.pro

358 GYLLFILHINACVYYWASNYEGIGTTRWVYDGEGN--------EYLRCYYWAVRTLITIG Cng3BFL.pro
308 LYILIIIHWNACIYFAISKFIGFGTDSWVYPNISIPEHGRLSRKYIYSLYWSTLTLTTIG CNGA3.pro
305 MYIVIIIHWNACVFYSISKAIGFGNDTWVYPDINDPEFGRLARKYVYSLYWSTLTLTTIG CHGA1.pro
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FIG. 1.

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410 GLPEPQTLFEIVFQLLNFFSGVFVFSSLIGQMRDVIGAATANQNYFRACMDDTIAYMNNY Cng3BFL.pro
368 ETPPPVKDEEYLFVVVDFLVGVLIFATIVGNVGSMISNMNASRAEFQAKIDSIKQYMQFR CNGA3.pro
365 ETPPPVRDSEYVFVVVDFLIGVLIFATIVGNIGSMISNMNAARAEFQARIDAIKQYMHFR CNGA1.pro

470 SIPKLVQKRVRTWYEYTWDSQRMLDESDLLKTLPTTVQLALAIDVNFSIISKVDLFKGCD Cng3BFL.pro
428 KVTKDLETRVIRWFDYLWANKKTVDEKEVLKSLPDKLKAEIAINVHLDTLKKVRIFQDCE CNGA3.pro
425 NVSKDMEKRVIKWFDYLWTNKKTVDEKEVLKYLPDKLRAEIAINVHLDRLKKVRIFADCE CNGA1.pro

530 TQMIYDMLLRLKSVLYLPGDFVCKKGEIGKEMYIIKHGEVQVLGGPDGTKVLVTLKAGSV Cng3BFL.pro
488 AGLLVELVLKLRPTVFSPGDYICKKGDIGKEMYIINEGKLAVVAD-DGVTQFVVLSDGSY CNGA3.pro
485 AGLLVELVLKLQPQVYSPGDYICKKGDIGREMYIIKEGKLAVVAD-DGVTQFVVLSDGSY CNGA1.pro

590 FGEISLIAAGG---GNRRTANVVAHGFANLLTLDKKTLQEILVHYPDSERILMKKAR-VL Cng3BFL.pro
547 FGEISILNIKGSKSGNRRTANIRSIGYSDLFCLSKDDLMEALTEYPEAKKALEEKGRQIL CNGA3.pro
544 FGEISILNIKGSKAGNRRTANIKSIGYSDLFCLSKDDLMEALTEYPDAKTMLEEKGKQIL CNGA1.pro

646 LKQKAKTAEATPPRKDLALLFPPKEETPKLFKTLLGGTGKASLARLLKLKREQAAQKKEN Cng3BFL.pro
607 MKDNLIDEELARAGAD------PKDLEEKV--EQLGSSLDTLQTRFARLL---------- CNGA3.pro
604 MKDGLLDLNIANAGSD------PKDLEEKV--TRMEGSVDLLQTRFARIL----------CNGA1.pro

706 SEGGEEEGKENEDKQKENEDKQKENEDKGKENEDKDKGREPEEKPLDRPECTASPIAVEE Cng3BFL.pro
649 --------AEYNATQMKMKQRLSQLESQVKGGGDK-------------------PLADGE CNGA3.pro
646 --------AEYESMQQKLKQRLTKVEKFLKPLIDT-------------------EFSSIE CNGA1.pro

766 EPHSVRRTVLPRGTSRQSLLIISMAPSAEGGEEVLTIEVKEKAKQ.               Cng3BFL.pro
682 VP----------------------------GDATKTED----KQQ.               CNGA3.pro
679 GP----------------------------GAESGPID----ST.                CNGA1.pro
```

FIG. 1. (CONTINUED)

CCATCCTAATACGACTCACTATAGGGCTCGAGCGGCCGCCCGGGCAGGTCATTTCTCTACCTTAAGGCACAGTCATA

AATACAGAGGGTTTTCAGAACCACCTCAGAGAAGATGTTTAAATCGCTGACAAAAGTCAACAAGGTGAAGCCTATAG

GAGAGAACAATGAGAATGAACAAAGTTCTCGTCGGAATGAAGAAGGCTCTCACCCAAGTAATCAGTCTCAGCAAACC

ACAGCACAGGAAGAAAACAAAGGTGAAGAGAAATCTCTCAAAACCAAGTCAACTCCAGTCACGTCTGAAGAGCCACA

CACCAACATACAAGACAAACTCTCCAAGAAAAATTCCTCTGGAGATCTGACCACAAACCCTGACCCTCAAAATGCAG

CAGAACCAACTGGAACAGTGCCAGAGCAGAAGGAAATGGACCCCGGGAAAGAAGGTCCAAACAGCCCACAAAACAAA

CCGCCTGCAGCTCCTGTTATAAATGAGTATGCCGATGCCCAGCTACACAACCTGGTGAAAAGAATGCGTCAAAGAAC

AGCCCTCTACAAGAAAAAGTTGGTAGAGGGAGATCTCTCCTCACCCGAAGCCAGCCCACAAACTGCAAAGCCCACGG

CTGTACCACCAGTAAAAGAAAGCGATGATAAGCCAACAGAACATTACTACAGGCTGTTGTGGTTCAAAGTCAAAAAG

ATGCCTTTAACAGAGTACTTAAAGCGAATTAAACTTCCAAACAGCATAGATTCATACACAGATCGACTCTATCTCCT

GTGGCTCTTGCTTGTCACTCTTGCCTATAACTGGAACTGCTGGTTTATACCACTGCGCCTCGTCTTCCCATATCAAA

CCGCAGACAACATACACTACTGGCTTATTGCGGACATCATATGTGATATCATCTACCTTTATGATATGCTATTTATC

CAGCCCAGACTCCAGTTTGTAAGAGGAGGAGACATAATAGTGGATTCAAATGAGCTAAGGAAACACTACAGGACTTC

TACAAAATTTCAGTTGGATGTCGCATCAATAATACCATTTGATATTTGCTACCTCTTCTTTGGGTTTAATCCAATGT

FIG. 2.

TTAGAGCAAATAGGATGTTAAAGTACACTTCATTTTTTGAATTTAATCATCACCTAGAGTCTATAATGGACAAAGCA

TATATCTACAGAGTTATTCGAACAACTGGATACTTGCTGTTTATTCTGCACATTAATGCCTGTGTTTATTACTGGGC

TTCAAACTATGAAGGAATTGGCACTACTAGATGGGTGTATGATGGGGAAGGAAACGAGTATCTGAGATGTTATTATT

GGGCAGTTCGAACTTTAATTACCATTGGTGGCCTTCCAGAACCACAAACTTTATTTGAAATTGTTTTTCAACTCTTG

AATTTTTTTCTGGAGTTTTTGTGTTCTCCAGTTTAATTGGTCAGATGAGAGATGTGATTGGAGCAGCTACAGCCAA

TCAGAACTACTTCCGCGCCTGCATGGATGACACCATTGCCTACATGAACAATTACTCCATTCCTAAACTTGTGCAAA

AGCGAGTTCGGACTTGGTATGAATATACATGGGACTCTCAAAGAATGCTAGATGAGTCTGATTTGCTTAAGACCCTA

CCAACTACGGTCCAGTTAGCCCTCGCCATTGATGTGAACTTCAGCATCATCAGCAAAGTCGACTTGTTCAAGGGTTG

TGATACACAGATGATTTATGACATGTTGCTAAGATTGAAATCCGTTCTCTATTTGCCTGGTGACTTTGTCTGCAAAA

AGGGAGAAATTGGCAAGGAAATGTATATCATCAAGCATGGAGAAGTCCAAGTTCTTGGAGGCCCTGATGGTACTAAA

GTTCTGGTTACTCTGAAAGCTGGGTCGGTGTTTGGAGAAATCAGCCTTCTAGCAGCAGGAGGAGGAAACCGTCGAAC

TGCCAATGTGGTGGCCCACGGGTTTGCCAATCTTTTAACTCTAGACAAAAAGACCCTCCAAGAAATTCTAGTGCATT

ATCCAGATTCTGAAAGGATCCTCATGAAGAAAGCCAGAGTGCTTTTAAAGCAGAAGGCTAAGACCGCAGAAGCAACC

CCTCCAAGAAAAGATCTTGCCCTCCTCTTCCCACCGAAAGAAGAGACACCCAAACTGTTTAAAACTCTCCTAGGAGG

FIG. 2. (CONTINUED)

CACAGGAAAAGCAAGTCTTGCAAGACTACTCAAATTGAAGCGAGAGCAAGCAGCTCAGAAGAAAGAAAATTCTGAAG

GAGGAGAGGAAGAAGGAAAAGAAAATGAAGATAAACAAAAAGAAAATGAAGATAAACAAAAAGAAAATGAAGATAAA

GGAAAAGAAAATGAAGATAAAGATAAAGGAAGAGAGCCAGAAGAGAAGCCACTGGACAGACCTGAATGTACAGCAAG

TCCTATTGCAGTGGAGGAAGAACCCCACTCAGTTAGAAGGACAGTTTTACCCAGAGGGACTTCTCGTCAATCACTCA

TTATCAGCATGGCTCCTTCTGCTGAGGGCGGAGAAGAGGTTCTTACTATTGAAGTCAAAGAAAAGGCTAAGCAATAA

ATGTTTGATTATCTTTAGATGTGATATAGCTAGTTCCCAAAGTGATTGTACCTAGGATTGTAACTTAAATTAACGAG

GGGAAACGACATGCTGGGACCCTTGAGAAACGAAAGGCAAATCCCTAGCTTAGTTTCTAGGACTTATCTGAGAGTGT

GATTTCATGCAGTGGTAATAAGAAGATTATTAAAAGCAAAAAAAAAAAAAAAAAAAAAAAAA

FIG. 2. (CONTINUED)

ATGTTTAAATCGCTGACAAAAGTCAACAAGGTGAAGCCTATAGGAGAGAACAATGAGAATGAACAAAGTTCTCGTCGGAA

TGAAGAAGGCTCTCACCCAAGTAATCAGTCTCAGCAAACCACAGCACAGGAAGAAAACAAAGGTGAAGAGAAATCTCTCA

AAACCAAGTCAACTCCAGTCACGTCTGAAGAGCCACACACCAACATACAAGACAAACTCTCCAAGAAAAATTCCTCTGGA

GATCTGACCACAAACCCTGACCCTCAAAATGCAGCAGAACCAACTGGAACAGTGCCAGAGCAGAAGGAAATGGACCCCGG

GAAAGAAGGTCCAAACAGCCCACAAAACAAACCGCCTGCAGCTCCTGTTATAAATGAGTATGCCGATGCCCAGCTACACA

ACCTGGTGAAAAGAATGCGTCAAAGAACAGCCCTCTACAAGAAAAAGTTGGTAGAGGGAGATCTCTCCTCACCCGAAGCC

AGCCCACAAACTGCAAAGCCCACGGCTGTACCACCAGTAAAAGAAAGCGATGATAAGCCAACAGAACATTACTACAGGCT

GTTGTGGTTCAAAGTCAAAAAGATGCCTTTAACAGAGTACTTAAAGCGAATTAAACTTCCAAACAGCATAGATTCATACA

CAGATCGACTCTATCTCCTGTGGCTCTTGCTTGTCACTCTTGCCTATAACTGGAACTGCTGGTTTATACCACTGCGCCTC

GTCTTCCCATATCAAACCGCAGACAACATACACTACTGGCTTATTGCGGACATCATATGTGATATCATCTACCTTTATGA

TATGCTATTTATCCAGCCCAGACTCCAGTTTGTAAGAGGAGGAGACATAATAGTGGATTCAAATGAGCTAAGGAAACACT

ACAGGACTTCTACAAAATTTCAGTTGGATGTCGCATCAATAATACCATTTGATATTTGCTACCTCTTCTTTGGGTTTAAT

CCAATGTTTAGAGCAAATAGGATGTTAAAGTACACTTCATTTTTTGAATTTAATCATCACCTAGAGTCTATAATGGACAA

AGCATATATCTACAGAGTTATTCGAACAACTGGATACTTGCTGTTTATTCTGCACATTAATGCCTGTGTTTATTACTGGG

FIG. 3.

CTTCAAACTATGAAGGAATTGGCACTACTAGATGGGTGTATGATGGGGAAGGAAACGAGTATCTGAGATGTTATTATTGG
GCAGTTCGAACTTTAATTACCATTGGTGGCCTTCCAGAACCACAAACTTTATTTGAAATTGTTTTTCAACTCTTGAATTT
TTTTTCTGGAGTTTTTGTGTTCTCCAGTTTAATTGGTCAGATGAGAGATGTGATTGGAGCAGCTACAGCCAATCAGAACT
ACTTCCGCGCCTGCATGGATGACACCATTGCCTACATGAACAATTACTCCATTCCTAAACTTGTGCAAAAGCGAGTTCGG
ACTTGGTATGAATATACATGGGACTCTCAAAGAATGCTAGATGAGTCTGATTTGCTTAAGACCCTACCAACTACGGTCCA
GTTAGCCCTCGCCATTGATGTGAACTTCAGCATCATCAGCAAAGTCGACTTGTTCAAGGGTTGTGATACACAGATGATTT
ATGACATGTTGCTAAGATTGAAATCCGTTCTCTATTTGCCTGGTGACTTTGTCTGCAAAAAGGGAGAAATTGGCAAGGAA
ATGTATATCATCAAGCATGGAGAAGTCCAAGTTCTTGGAGGCCCTGATGGTACTAAAGTTCTGGTTACTCTGAAAGCTGG
GTCGGTGTTTGGAGAAATCAGCCTTCTAGCAGCAGGAGGAGGAAACCGTCGAACTGCCAATGTGGTGGCCCACGGGTTTG
CCAATCTTTTAACTCTAGACAAAAAGACCCTCCAAGAAATTCTAGTGCATTATCCAGATTCTGAAAGGATCCTCATGAAG
AAAGCCAGAGTGCTTTTAAAGCAGAAGGCTAAGACCGCAGAAGCAACCCCTCCAAGAAAAGATCTTGCCCTCCTCTTCCC
ACCGAAAGAAGAGACACCCAAACTGTTTAAAACTCTCCTAGGAGGCACAGGAAAAGCAAGTCTTGCAAGACTACTCAAAT
TGAAGCGAGAGCAAGCAGCTCAGAAGAAAGAAAATTCTGAAGGAGGAGAGGAAGAAGGAAAAGAAAATGAAGATAAACAA
AAAGAAAATGAAGATAAACAAAAAGAAAATGAAGATAAAGGAAAAGAAAATGAAGATAAAGATAAAGGAAGAGAGCCAGA

FIG. 3. (CONTINUED)

AGAGAAGCCACTGGACAGACCTGAATGTACAGCAAGTCCTATTGCAGTGGAGGAAGAACCCCACTCAGTTAGAAGGACAG

TTTTACCCAGAGGGACTTCTCGTCAATCACTCATTATCAGCATGGCTCCTTCTGCTGAGGGCGGAGAAGAGGTTCTTACT

ATTGAAGTCAAAGAAAAGGCTAAGCAATAA

FIG. 3. (CONTINUED)

MFKSLTKVNKVKPIGENNENEQSSRRNEEGSHPSNQSQQTTAQEENKGEEKSLKTKSTPVTS

EEPHTNIQDKLSKKNSSGDLTTNPDPQNAAEPTGTVPEQKEMDPGKEGPNSPQNKPPAAPVI

NEYADAQLHNLVKRMRQRTALYKKKLVEGDLSSPEASPQTAKPTAVPPVKESDDKPTEHYYR

LLWFKVKKMPLTEYLKRIKLPNSIDSYTDRLYLLWLLLVTLAYNWNCWFIPLRLVFPYQTAD

NIHYWLIADIICDIIYLYDMLFIQPRLQFVRGGDIIVDSNELRKHYRTSTKFQLDVASIIPF

DICYLFFGFNPMFRANFMLKYTSFFEFNHHLESIMDKAYIYRVIRTTGYLLFILHINACVYY

WASNYEGIGTTRWVYDGEGNEYLRCYYWAVRTLITIGGLPEPQTLFEIVFQLLNFFSGVFVF

SSLIGQMRDVIGAATANQNYFRACMDDTIAYMNNYSIPKLVQKRVRTWYEYTWDSQRMLDES

DLLKTLPTTVQLALAIDVNFSIISKVDLFKGCDTQMIYDMLLRLKSVLYLPGDFVCKKGEIG

KEMYIIKHGEVQVLGGPDGTKVLVTLKAGSVFGEISLLAAGGGNRRTANVVAHGFANLLTLD

KKTLQEILVHYPDSERILMKKARVLLKQKAKTAEATPPRKDLALLFPPKEETPKLFKTLLGG

TGKASLARLLKLKREQAAQKKENSEGGEEEGKENEDKQKENEDKQKENEDKGKENEDKDKGR

EPEEKPLDRPECTASPIAVEEEPHSVRRTVLPRGTSRQSLIISMAPSAEGGEEVLTIEVKEK

AKQ

FIG. 4.